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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,813	03/13/2002	Martina Ebert	25045-13	2758
7590 07/06/2004				
J. Herbert O'Toole		EXAMINER		
Nexsen Pruet Jacobs & Pollard, LLC		YOON, TAE H		
201 West McBee Avenue, Suite 400		ART UNIT		
Post Office Drawer 10648		PAPER NUMBER		
Greenville, SC 29603		1714		

DATE MAILED: 07/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/099,813

Applicant(s)

EBERT ET AL.

Examiner

Tae H Yoon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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The recited "----long flow length a poor show unsatisfactory surface quality" in [0027] of the specification does not make sense.

The recited "moldingmaterials" in line 1 of claim 1 and line 4 of claim 10 should be "molding materials".

The recited "including" (line 12 of claim 1), "especially (line 24 of claim 1 and line 3 of claim 12), "preferred" (line 2 of claim 3) and "such as" (line 2 of claim 12) are objected and separate dependent claims reciting those narrower limitations are suggested.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 12 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The recited "The use of" is non-statutory subject matter, and "A method of using" is suggested.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited "(B) --- a semi-crystalline semi-aromatic (co)polyamide" in line 6 of claim 1 lacks antecedent basis, and said (B) should be (A). Also, "polyamides and copolyamides" are recited in line 3, and thus substitution of said "polyamides and copolyamides" with "(co)polyamide" is suggested. Singular and plural forms of (co)polyamide and polyamide are recited in claims and the recitation of either singular or plural form is need in order to have consistency. The same reason is applied to the polyamide composition and polyamide compositions.

The recited "(C) --- a non-crystalline or low-crystalline (co)polyamide" in line 16 of claim 1 is confusing since "amorphous (co)polyamide (B)" is recited in line 4.

The recited "type" and "-like" in (D) and (E) of claim 1, line 3 of claim 3 and lines 3 and 4 of claim 7 are indefinite and cancellation or correction is suggested.

The recited "any one of claim 1" in claim 4 is incorrect and cancellation of "any one of" is needed.

The recited "wt.-%" in claims is confusing and indefinite since said "%" implies that the total amount is 100%. But, the minimum total amount in claim 1 is **125 wt.-%** (92 wt.-% of a semi-crystalline semi-aromatic (co)polyamide + 8 wt.-% of a non-crystalline or low-crystalline (co)polyamide + 25 wt.-% of a filler), and thus the basis for said "wt.-%" is indefinite.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 7-090178 in view of Visioli (US 5,897,901), Lahary et al (US 5,440,006) and EP 1 018 534 A2.

JP teaches a glass fiber reinforced composition comprising a polyamide blend of crystalline aromatic polyamide and amorphous (equals to non- crystalline) or low-crystalline polyamide and molded articles thereof in abstract. Said crystalline aromatic polyamide is obtained from 30-100 mol% of terephthalic acid, 0-40 mol% of aromatic dicarboxylic acid except terephthalic acid and 0-70 mol% of aliphatic alkylene diamine unit.

The instant invention further recites semi-crystalline semi-aromatic polyamide with the recited melting point and particular mol% of units for said semi-crystalline semi-aromatic polyamide and amorphous or low- crystalline polyamide over JP.

However, it is well known in the art that semi-crystalline aromatic polyamide equals to crystalline aromatic polyamide absent a particular definition as evidenced by Visioli, col. 4, lines 23-31 since 100% crystalline aromatic polyamide is impossible to obtain. Also, said aromatic polyamide equals to semi-aromatic polyamide since polyamide of JP also contains aliphatic units from diamines. Isophthalic acid is one of the art well known aromatic dicarboxylic acid falls within the scope of JP as taught by EP, [0020].

Visioli teaches the instant amorphous (equals to non- crystalline) or low-crystalline polyamide at col. 5, lines 55-59. Lahary et al teach that semi-crystalline

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semi-aromatic polyamides have a melting point of 310-350 °C (col. 10, lines 49-50, col. 13, line 33, col. 16, line 42 and col. 18, line 11) and a post-condensation step by using three-steps in example 1.

It would have been obvious to one skilled in the art at the time of to utilize a semi-crystalline semi-aromatic polyamide obtained from 60-80 mol% of terephthalic acid, 20-40 mol% of Isophthalic acid and hexamethylenediamine having a melting point of 240-380 °C and an amorphous (non- crystalline) or low- crystalline polyamide of Visioli in JP since JP teaches employing amorphous (non- crystalline) or low- crystalline polyamide which is well known in the art as taught by Visioli and since the teaching of JP with respect to monomers or repeating units for a crystalline aromatic polyamide encompasses the instant invention and since the post-condensation step is a routine practice in the art as taught by Lahary et al and since isophthalic acid is one of the art well known aromatic dicarboxylic acid other than terephthalic acid as taught by EP absent showing otherwise.


Claim 7 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action, and if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Tae H Yoon  
Primary Examiner  
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THY/June 28, 2004